

CLAIMS

5 1. A method of controlling access to information in a distributed data processing system having: a server for storing said information, wherein said server further comprises a logging tool for creating a log file, and a client computer comprising an application program for controlling a software agent, wherein said software agent requests said information from said server, said method  
10 comprising the steps of:

identifying a software agent;

15 in response to said identifying step, storing all requests from said identified software agent in said log file;

20 in response to said storing step, analysing said log file;

in response to said analysing step, monitoring behaviour of said identified software agent, and

25 in response to said monitoring step, invoking at least one of a plurality of pre-defined rules to control said behaviour of said identified software agent.

30 2. The method according to claim 1, wherein said information is represented within any number of a

plurality of web pages, each of said any number of a plurality of web pages comprising a non-visible link.

3. The method according to claim 2, wherein a software agent requests one of a plurality of web pages, said identifying step further comprises the steps of:

dynamically generating a first unique identifier;

dynamically inserting said first unique identifier into a non-visible link associated with said one of a plurality of web pages, and

determining whether said one of a plurality of web pages is associated with further of a plurality of web pages.

4. The method according to claim 3, wherein:

if said determining step is successful, said first identifier is dynamically inserted into further non-visible links.

5. The method according to claim 3, wherein if said determining step is not successful, said identifying step further comprises the steps of:

sending said one of a plurality of web pages to said identified software agent;

in response to said sending step, requesting, from said server by said identified software agent, any number of a plurality of links associated with said one of a plurality of web pages;

5

in response to said requesting step, extracting, by said identified software agent, said any number of a plurality of links;

10

in response to said extracting step, passing, by said identified software agent, said any number of a plurality of links to said client application program, and

15

in response to said passing step, determining, by said client application program, which of said any number of a plurality of links to display.

20

6. The method according to claim 5, wherein said any number of a plurality of links is displayed within a web browsing session running on said client computer.

25

7. The method according to claim 1, wherein said analysing step further comprises the step of:

identifying a first value associated with said any number of a plurality of web pages and a second value associated with said further of a plurality of web pages.

30

8. The method according to claim 7, wherein said monitoring step further comprises the steps of:

utilising said first and second values to generate a third value, wherein said third value is associated with said identified software agent, and

utilising said third value and a fourth value associated with said all requests, to associate said first identifier and said identified software agent with a fifth value, wherein said fifth value is associated with a probability.

9. The method according to claim 8, wherein if said third value is not more than or equal to a first pre-determined threshold, said log file is analysed further.

10. The method according to claim 8, wherein if said fourth value is not more than or equal to a second pre-determined threshold, said log file is analysed further.

11. The method according to claim 7, wherein said identified software agent is associated with a profile, said profile comprising any number of a plurality of data fields unique to said identified software agent, wherein said invoking step further comprises the steps of:

associating said any number of a plurality of data fields with said at least one of a plurality of pre-defined rules;

5 determining whether a pre-defined response needs to be activated, and

in response to a successful determining step, activating said pre-defined response.

10 12. The method according to claim 11, wherein said log file further stores an address associated with a software agent and a name associated with said software agent.

15 13. The method according to claim 12, wherein at least one of said any number of a plurality of data fields is extracted from said log file.

20 14. The method according to claim 2, wherein a second unique identifier is generated and further inserted into a non-visible link.

25 15. The method according to claim 1, wherein said distributed data processing system further comprises an application server.

16. The method according to claim 1, wherein said at least one of a plurality of pre-defined rules controls a plurality of thread priorities associated with said

server, wherein at least one of a plurality of threads is associated with a software agent.

5 17. A system for controlling access to information, for use in a distributed data processing system, said distributed data processing system comprising: a server for storing said information, wherein said server further comprises a logging tool for creating a log file, and a client computer comprising an application program for  
10 controlling a software agent, wherein said software agent requests said information from said server, said system for controlling access comprising:

means for identifying a software agent;

5 means, responsive to said identifying means, for storing all requests from said identified software agent in said log file;

10 means, responsive to said storing means, for analysing said log file;

means, responsive to said analysing means, for monitoring behaviour of said identified software agent,  
25 and

means, responsive to said monitoring means, for invoking at least one of a plurality of pre-defined rules to control said behaviour of said identified software  
30 agent.

18. The system according to claim 17, wherein said information is represented within any number of a plurality of web pages, each of said any number of a plurality of web pages comprising a non-visible link.

19. The system according to claim 18, wherein a software agent requests one of a plurality of web pages, said means for identifying further comprising:

means for dynamically generating a first unique identifier;

means for dynamically inserting said first unique identifier into a non-visible link associated with said one of a plurality of web pages, and

means for determining whether said one of a plurality of web pages is associated with further of a plurality of web pages.

20. The system according to claim 19, wherein:

if said determining means is successful, said first identifier is dynamically inserted into further non-visible links.

21. The system according to claim 19, wherein if said determining means is not successful, said means for identifying further comprises:

means for sending said one of a plurality of web pages to said identified software agent;

means, responsive to said means for sending, for requesting from said server by said identified software agent, any number of a plurality of links associated with said one of a plurality of web pages;

means, responsive to said means for requesting, for extracting by said identified software agent, said any number of a plurality of links;

means, responsive to said means for extracting, for passing by said identified software agent, said any number of a plurality of links to said client application program, and

means, responsive to said means for passing, for determining by said client application program, which of said any number of a plurality of links to display.

22. The system according to claim 21, wherein said any number of a plurality of links is displayed within a web browsing session running on said client computer.

23. The system according to claim 17, wherein said means for analysing further comprises:

means for identifying a first value associated with said any number of a plurality of web pages and a second



value associated with said further of a plurality of web pages.

24. The system according to claim 23, wherein said means  
5 for monitoring further comprises:

means for utilising said first and second values to  
generate a third value, wherein said third value is  
associated with said identified software agent, and

10 means for utilising said third value and a fourth  
value associated with said all requests, to associate  
said first identifier and said identified software agent  
with a fifth value, wherein said fifth value is  
5 associated with a probability.

25. The system according to claim 24, wherein if said  
third value is not more than or equal to a first  
pre-determined threshold, said log file is analysed  
10 further.

26. The system according to claim 24, wherein if said  
fourth value is not more than or equal to a second  
pre-determined threshold, said log file is analysed  
25 further.

27. The system according to claim 23, wherein said  
identified software agent is associated with a profile,  
said profile comprising any number of a plurality of data

fields unique to said identified software agent, wherein said means for invoking further comprises:

5 means for associating said any number of a plurality of data fields with said at least one of a plurality of pre-defined rules;

means for determining whether a pre-defined response needs to be activated, and

10 means, responsive to successful determining means, for activating said pre-defined response.

20 28. The system according to claim 27, wherein said log file further stores an address associated with a software agent and a name associated with said software agent.

25 29. The system according to claim 28, wherein at least one of said any number of a plurality of data fields is extracted from said log file.

30. The system according to claim 18, wherein a second unique identifier is generated and further inserted into a non-visible link.

25 31. The system according to claim 17, wherein said distributed data processing system further comprises an application server.

32. The system according to claim 17, wherein said at least one of a plurality of pre-defined rules controls a plurality of thread priorities associated with said server, wherein at least one of a plurality of threads is associated with a software agent.

33. A distributed data processing system comprising: a server for storing said information, wherein said server further comprises a logging tool for creating a log file, and a client computer comprising an application program for controlling a software agent, wherein said software agent requests said information from said server, and

a system for controlling access to information, comprising:

means for identifying a software agent;

means, responsive to said identifying means, for storing all requests from said identified software agent in said log file;

means, responsive to said storing means, for analysing said log file;

means, responsive to said analysing means, for monitoring behaviour of said identified software agent, and

means, responsive to said monitoring means, for invoking at least one of a plurality of pre-defined rules to control said behaviour of said identified software agent.

5

34. Computer readable code stored on a computer readable storage medium for controlling access to information, for use in a distributed data processing system comprising: a server for storing said information, wherein said server further comprises a logging tool for creating a log file, and a client computer comprising an application program for controlling a software agent, wherein said software agent requests said information from said server, said computer readable code comprising:

10

means for identifying a software agent;

means, responsive to said identifying means, for storing all requests from said identified software agent in said log file;

means, responsive to said storing means, for analysing said log file;

means, responsive to said analysing means, for monitoring behaviour of said identified software agent, and

means, responsive to said monitoring means, for invoking at least one of a plurality of pre-defined rules

30

to control said behaviour of said identified software agent.